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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,970	12/20/2001	Karl Hansen	24,954-25	9112

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EXAMINER

COTTINGHAM, JOHN R

ART UNIT PAPER NUMBER

3679

DATE MAILED: 03/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,970

Applicant(s)

HANSEN, KARL

Examiner

John R. Cottingham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) 16-17 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-15 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group 1, claims 1-6 and 10-19 in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 16-17 and 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Groups II-X, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 10-15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mercer U.S. Patent 4,478,546. Mercer shows all of the claimed limitations of an apparatus in Figures 1-9.

Regarding claim 1, an apparatus for joining a first member 8b to a second member 21 via a threaded coupling member 10, said apparatus comprising: a first member having an interlocking structure 17 disposed at an engaging region; a threaded coupling member 11a and 11b having an external thread set and having a complementary portion corresponding to a portion of the interlocking structure 17; and a

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second member 21 having an internal thread set 20 adapted to engage a portion of the external thread set of the threaded coupling member and to receive a portion of the engaging region of the first member within the internal thread set to thereby connect the second member to the first member.

Regarding claim 2, wherein the first member 8b is a planar element.

Regarding claim 3, wherein the interlocking structure is formed in a region adjacent an edge portion of the first member 8b.

Regarding claim 4, wherein the interlocking structure is more than one interlocking structure (both sides of 17).

Regarding claim 5, wherein said interlocking structure is a selected one from among the group including: a slot, a groove, an aperture, a recessed portion, a blind hole, a pin, a shank, a ridge feature, a tang, a serpentine feature, an elbow feature, and **a lip feature.**

Regarding claim 6, wherein the threaded coupling member has a larger diameter dimension than a thickness dimension of the first member.

Regarding claim 10, an apparatus for connecting two members 8b and 21 together using a binding force provided by an internal thread set of one of the two members, said apparatus comprising: a first member 8b having a pair of opposing major surfaces, an engaging region on at least one of the major surfaces, and an interlocking structure (protrusion on 17) disposed at said engaging region; an elongate threaded coupling member 11b and 11a having an external thread set and an engaging portion corresponding to the interlocking structure of the first member 8b, said threaded

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coupling member removably engaging each of the pair of major surfaces of the first member and removably engaging the interlocking structure; and a second member 21 having an internal thread set 20 sized to cooperate with the external thread set of the threaded coupling member, wherein when said external thread set of the threaded coupling member is threadedly received within the internal thread set said threaded coupling member securely binds the first member to the second member.

Regarding claim 11, wherein elongate threaded coupling member is two longitudinal portions of a threaded shank each having an threaded exterior surface and a substantially flat interior surface.

Regarding claim 12, wherein the interlocking structure is a pair of pin members (protrusions on 17) coupled to the substantially flat interior surface of one of the two longitudinal portions of the threaded shank.

Regarding claim 13, wherein the thickness of the first member is less than a diameter of the internal thread set.

Regarding claim 14, An apparatus for joining two members 8b and 21 via a threaded coupling member, said apparatus comprising: a first member 8b having an interlocking structure 17 disposed proximate an edge; an elongate threaded coupling member 11a and 11b having an external thread set and an engaging portion corresponding to the interlocking structure of the first member 8b, said threaded coupling member removably engaging the interlocking structure and extending away from the edge of the first member; and a second member 21 having an internal thread set 20 sized to cooperate with the external thread set of the threaded coupling member,

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said internal thread set operatively receiving a portion of the external thread set of the threaded coupling member and a portion of the first member to securely bind the first member to the second member.

Regarding claim 15, wherein the interlocking structure (both sides of 17) is more than one interlocking structure.

Regarding claim 18, an apparatus for joining two members via a threaded coupling member, said apparatus comprising: a first member 8b having an portion 17 extending from an edge and defining an interlocking structure; an elongate threaded coupling member 11a and 11b having an external thread set and an engaging portion corresponding to the interlocking structure of the first member 8b, said threaded coupling member removably engaging the interlocking structure 17; a second member 21 having an internal thread set 20 sized to cooperate with the external thread set of the threaded coupling member, said internal thread set operatively receiving a portion of the external thread set of the threaded coupling member and a portion of the first member to securely bind the first member to the second member.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Strong U.S. Patent 3,456,547 and Grayson U.S. Patent 3,922,946 show similar inventions.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (703)

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306-3439. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-216.



John R. Cottingham
Examiner
Art Unit 3679

jrc
March 13, 2003